Edd Clark & Associates, Inc.
Environmental Consultants

June 30, 2006
Job No.: 0369, 001.00

Rodney and Georgia Miller Irrevocable Trust
% Gayle Veale
416 South Oregon Street
Yreka, CA 96097

Groundwater Monitoring Report - March 2006 Event
198 High Street
Sebastopol, California

Dear Ms. Veale:

Please accept this as Edd Clark & Associates, Inc.'s (EC&A's) report of the March 2006 groundwater monitoring event at 198 High Street (site) in Sebastopol, California (Figure 1). Groundwater monitoring is being conducted at the site at the request of the County of Sonoma Department of Health Services (CSDHS) because of a release of fuel hydrocarbons (FHCs) to the subsurface from underground storage tanks (USTs) for gasoline and diesel formerly located at the site. A 33-day high vacuum dual-phase extraction (HVDPE) event was conducted at the site from September 2, 2005 to October 21, 2005. The March 2006 event is the second sampling event since the conclusion of the HVDPE event. Work conducted for the March 2006 groundwater monitoring event included measuring depth to water (DTW) in and collecting groundwater samples for chemical analysis from monitoring wells MW-1 through MW-5 and extraction wells EW-1 and EW-2 (Figure 2); calculating groundwater-flow direction and gradient; evaluating the results of the analyses and calculations; and preparing this report. A copy of this report will be sent to the CSDHS for their review.

Groundwater-level Measurements
On March 9, 2006, EC&A personnel measured DTW in MW-1 through MW-5, EW-1 and EW-2. DTW below the top of the well casing (TOC) in each well was measured to the nearest 0.01 foot (ft) with a water-level meter. The meter was cleaned and rinsed prior to taking measurements in each well. The DTW was recorded after the well caps were removed and groundwater in the wells was allowed to equilibrate for a minimum of 15 minutes. The DTW in MW-1 through MW-5, EW-1 and EW-2 ranged from 15.93 ft (MW-3) to 20.40 ft (MW-1), and the calculated groundwater-flow direction and gradient in the vicinity of the former USTs were N03°W and 0.013 ft/ft, respectively (Table 1 and Figure 3).

Groundwater Field Logs containing the DTW measurements are in Appendix A. DTW data will be electronically submitted to the State GeoTracker Internet Database.

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Groundwater Sampling
On March 9, 2006, EC&A personnel collected groundwater samples from MW-1 through MW-5, EW-1 and EW-2. Prior to collecting samples, the wells were purged with a submersible pump and the purged water was checked for the presence of free-floating product. Free-floating product was not detected in the purged water; however, an odor of FHCs was detected in water purged from EW-1. Groundwater pH, temperature and electric conductivity were measured during purging of the wells at intervals of approximately one well-casing volume. Groundwater samples were collected from the wells after groundwater parameters stabilized and either the water level returned to a minimum of 80% of the initially recorded water level or sufficient water had re-entered the well to enable sample collection. Purge volumes and groundwater-quality parameters are recorded on the Field Logs in Appendix A.

Groundwater samples were collected in new single-sample, disposable bailers fitted with disposable bottom-emptying devices to minimize water degassing. The samples were transferred from the bailers to properly labeled, laboratory-supplied sterile sample containers, logged on a chain-of-custody form, placed on ice and transported to McCampbell Analytical, Inc. (MAI) for chemical analysis. MAI is a State-certified laboratory in Pacheco, California.

Decontamination Procedures
Sampling equipment was cleaned onsite with a low phosphorous, soap and water solution and double rinsed in tap water. Decontamination water and monitoring well purge water were placed in properly labeled, DOT 17H 55-gallon drums for temporary, onsite storage.

Groundwater Sample Analysis and Analytical Results
All groundwater samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline (g) and benzene, toluene, ethylbenzene and xylenes (BTEX) by Analytical Methods SW8015Cm/8021B. Groundwater samples collected from EW-1 and EW-2 were also analyzed for TPH as diesel (d) by Analytical Method SW8015C.

Benzene and xylenes were detected in the groundwater sample collected from MW-1 at 0.90 micrograms per liter (µg/l) and 0.58 µg/l, respectively. TPHg, TPHd and BTEX were detected in the sample collected from EW-1 at concentrations of 730 µg/l, 85 µg/l, 0.58 µg/l, 32 µg/l, 13 µg/l and 150 µg/l, respectively. MAI described the TPHg results from EW-1 as "heavier gasoline range compounds are significant (aged gasoline?) and no recognizable pattern". MAI described the TPHd results from MW-1 as "gasoline range compounds are significant".

Analytical results for groundwater samples collected from the monitoring and extraction wells are presented in Table 2. A complete copy of the analytical laboratory report is in Appendix B. The results of the analyses of the samples will be electronically submitted to the State GeoTracker Internet Database.

Discussion

TPHg

TPHg was detected in MW-1 at 300 µg/l in October 2004 and at 130 µg/l in March 2005. Analytical results since the July 2005 event indicate that concentrations of TPHg in MW-1 have decreased to ND (three consecutive events). TPHg has only been detected once in MW-2 (51 µg/l, October 2004), MW-3 (120 µg/l, July 2005) and MW-4 (82 µg/l, May 2003). TPHg has been detected in MW-5 for every sample event conducted to date except for the past two events following the HVDPE event. Concentrations of TPHg in MW-5 have decreased from 1100 µg/l (August 2002) to below the detection limit of 50 µg/l (November 2005 and March 2006).

The March 2006 event was the third monitoring event for extraction wells EW-1 and EW-2. For the three events conducted to date, EW-2 was non-detect (ND) for TPHg. For the March 2006 event, the only well in which TPHg was detected was EW-1. Although the concentration of TPHg rebounded in EW-1 since the last sampling event (320 µg/l in November 2005 to 730 µg/l in March 2006), the concentration has decreased significantly since 3500 µg/l was detected in July 2005 prior to the HVDPE event.

BTEX

Benzene has not been detected above its reporting limit of 0.5 µg/l in MW-2, MW-3 and EW-2. In MW-1, benzene has been detected in five of the fourteen events conducted to date and has ranged from 0.68 µg/l (February 2003) to 8.2 µg/l (October 2004). In MW-4, benzene has been detected only once (3.6 µg/l, May 2003).

In MW-5, benzene had been detected for every sampling event up until July 2005, at concentrations ranging from 0.93 µg/l (December 2003) to 13 µg/l (August 2002). Since July 2005, benzene has been ND in MW-5. In EW-1, benzene decreased from 26 µg/l in July 2005 to 0.58 µg/l in March 2006.

Sporadic, low concentrations of toluene, ethylbenzene, and/or xylenes have been reported in MW-1, MW-2, MW-3 and MW-4. Low concentrations of toluene, ethylbenzene, and/or xylenes have been detected in groundwater from MW-5 for all but the past two events. Between November 2005 and March 2006, concentrations of toluene, ethylbenzene and xylenes increased in EW-1, but are still much lower than the concentrations detected in July 2005. BTEX compounds have not been detected in EW-2.

TPHd

TPHd has not been detected in MW-1 through MW-4 nor EW-2. Although low concentrations of diesel-range compounds were reported in groundwater from MW-5 in four of the eight sample events for which TPHd was analyzed, the laboratory reported that gasoline-range compounds were significant, making it likely that the diesel-range compounds detected in MW-5 represent degraded gasoline. TPHd has been detected in EW-1 for all three events conducted to date at concentrations ranging from 85 µg/l (March 2006) to 290 µg/l (July 2005). However, the laboratory has

consistently reported that gasoline-range compounds were significant, making it likely that the diesel-range compounds detected in EW-1 also represent degraded gasoline. Additionally, for the November 2005 event, the TPHd detection in EW-1 was also characterized by the laboratory as "oil range compounds are significant".

Fuel Oxygenates/Lead Scavengers

The lead scavenger 1,2-DCA has been detected only in groundwater from MW-2 for one sample event (2.1 µg/l, July 2001). MTBE and/or other fuel oxygenates have never been detected in groundwater from site monitoring wells; the two extraction well samples are not analyzed for fuel oxygenates nor lead scavengers.

Conclusions

As in previous sample events, groundwater-flow direction on March 9, 2005, was northerly. MW-2 and MW-4 have been in the approximate down-gradient direction from the location of the former USTs for every sample event. Only sporadic, minor detections of FHCs have been detected in these wells. For the March 2006 event, no analytes were detected in either of these wells.

Although MW-5 is cross-gradient to the former USTs, this well has historically been the most impacted monitoring well on the site. The maximum TPHg, TPHd and benzene concentrations detected to date in MW-5 are 1100 µg/l, 140 µg/l and 13 µg/l, respectively (all in August 2002). Since November 2005, the first sampling event since the September-October 2005 HVDPE event, no analytes have been detected in MW-5.

In the March 2006 event, the highest FHC concentrations in groundwater at the site were detected in extraction well EW-1. The TPHg and BTEX concentrations in this well had rebounded from the November 2005 concentrations, which were measured immediately after the conclusion of the HVDPE event. However, comparison of the analytical results from the pre-HVDPE event conducted in July 2005 with those from the March 2006 event show that TPHg and benzene concentrations decreased from 3500 µg/l and 26 µg/l, respectively, to 730 µg/l and 0.58 µg/l, respectively.

Recommendations

EC&A recommends continued quarterly monitoring of all monitoring and extraction wells for at least one more year to evaluate FHC concentration trends in EW-1 and MW-5. Water levels should be measured in all of the wells for each event. Groundwater samples should be collected from each well and analyzed for TPHg/BTEX by Analytical Methods SW8015Cm/8021B. Groundwater samples collected from the extraction wells should also be analyzed for TPHd by Analytical Method SW8015C.

Schedule

A groundwater sampling event was conducted at the site on June 9, 2006.

Limitations

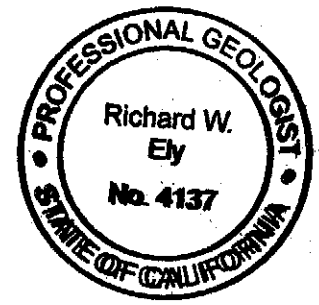
The conclusions presented in this report are professional opinions based on the information presented herein, which includes data generated by others. Whereas EC&A does not guarantee the accuracy of data supplied by third parties, we reserve the right to use this data in formulating our professional opinions. This report is intended only for the indicated purpose and project site. Conclusions and recommendations presented herein apply to site conditions existing at the time of our study. Changes in the conditions of the site property can occur with time because of natural processes or the works of man on the site or adjacent properties. Changes in applicable standards can also occur as the result of legislation or from the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond our control.

Thank you for allowing EC&A to provide environmental services for you. Please call John Calomiris, project manager, if you have any questions.

Sincerely,

Etta Jon VandenBosch
Environmental Scientist

Richard Ely, PG #4137
Senior Geologist



Attachments: Figure 1 - Site Location Map
Figure 2 - Site Plan
Figure 3 - Groundwater Elevation Map, 09 March 2006

Table 1- Water Level Data
Table 2 - Analytical Results-Groundwater Samples from Monitoring and Extraction Wells

Appendix A - Groundwater Field Logs
Appendix B - Analytical Laboratory Report

cc: Darcy M. Bering, County of Sonoma Department of Health Services

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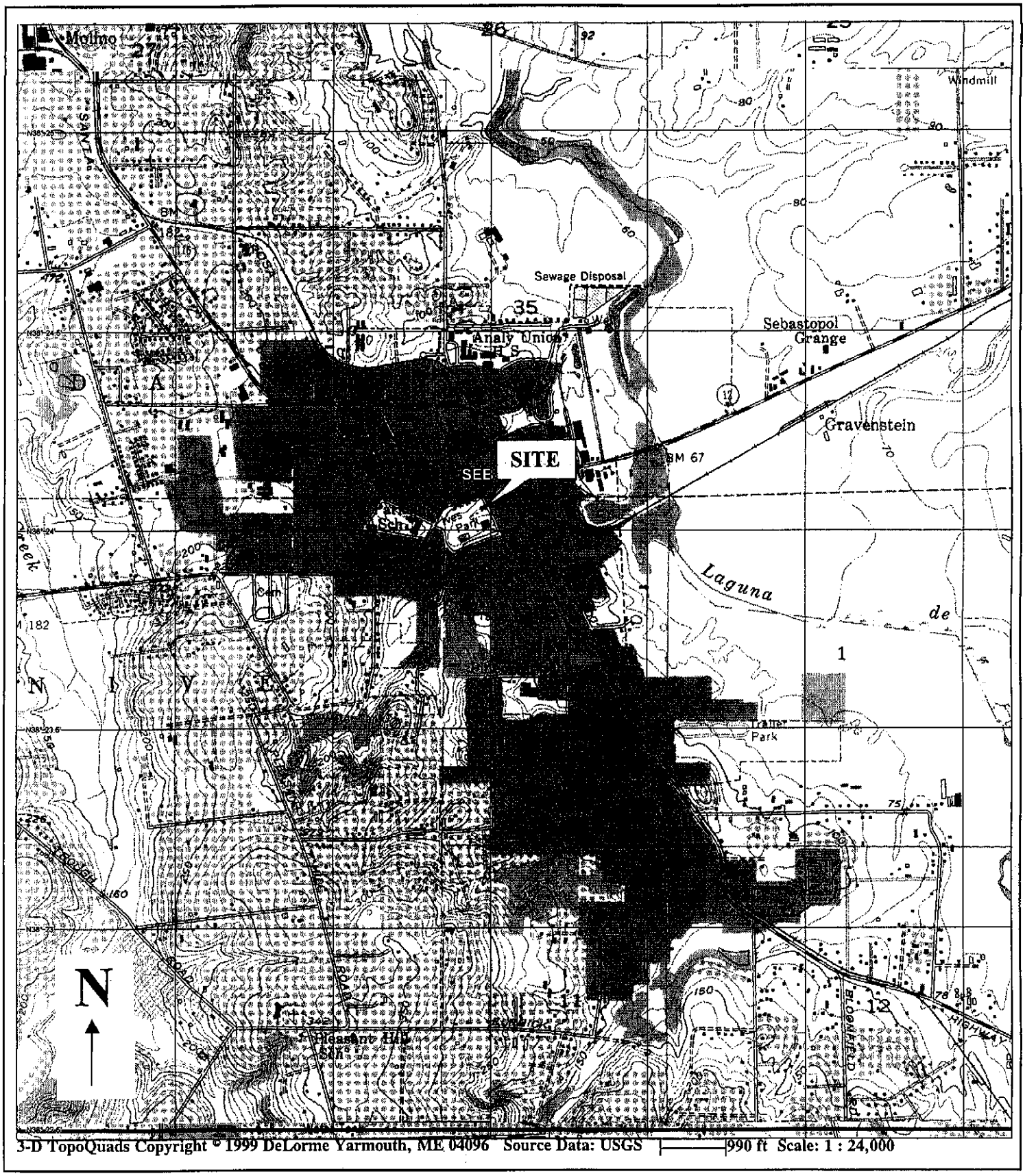

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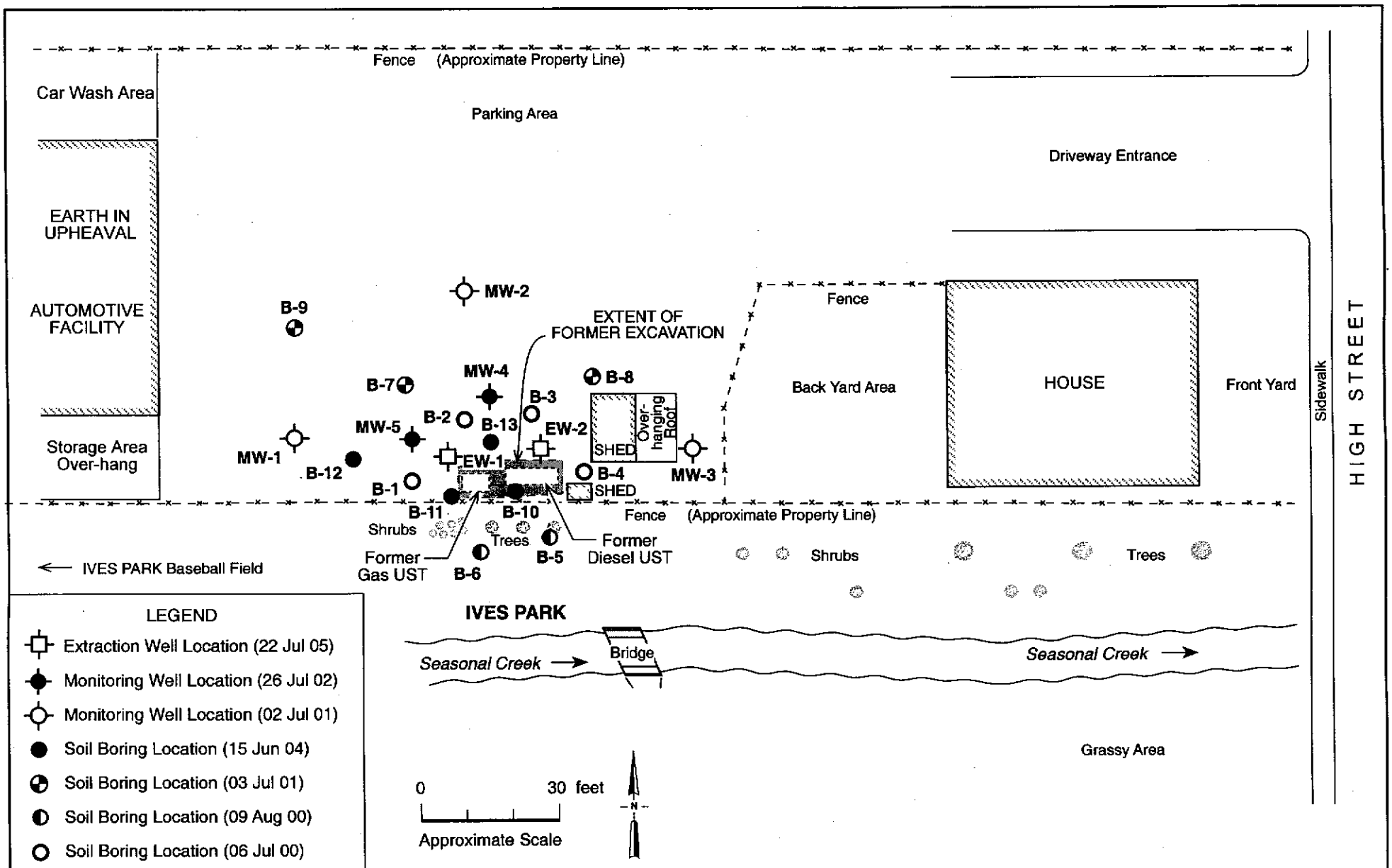
Site Location Map
198 High Street
Sebastopol, California

FIGURE
1

JOB NUMBER	REVIEWED BY:	DATE:	REVISED DATE:
0369,001.99	Lori Brown	February 2003	



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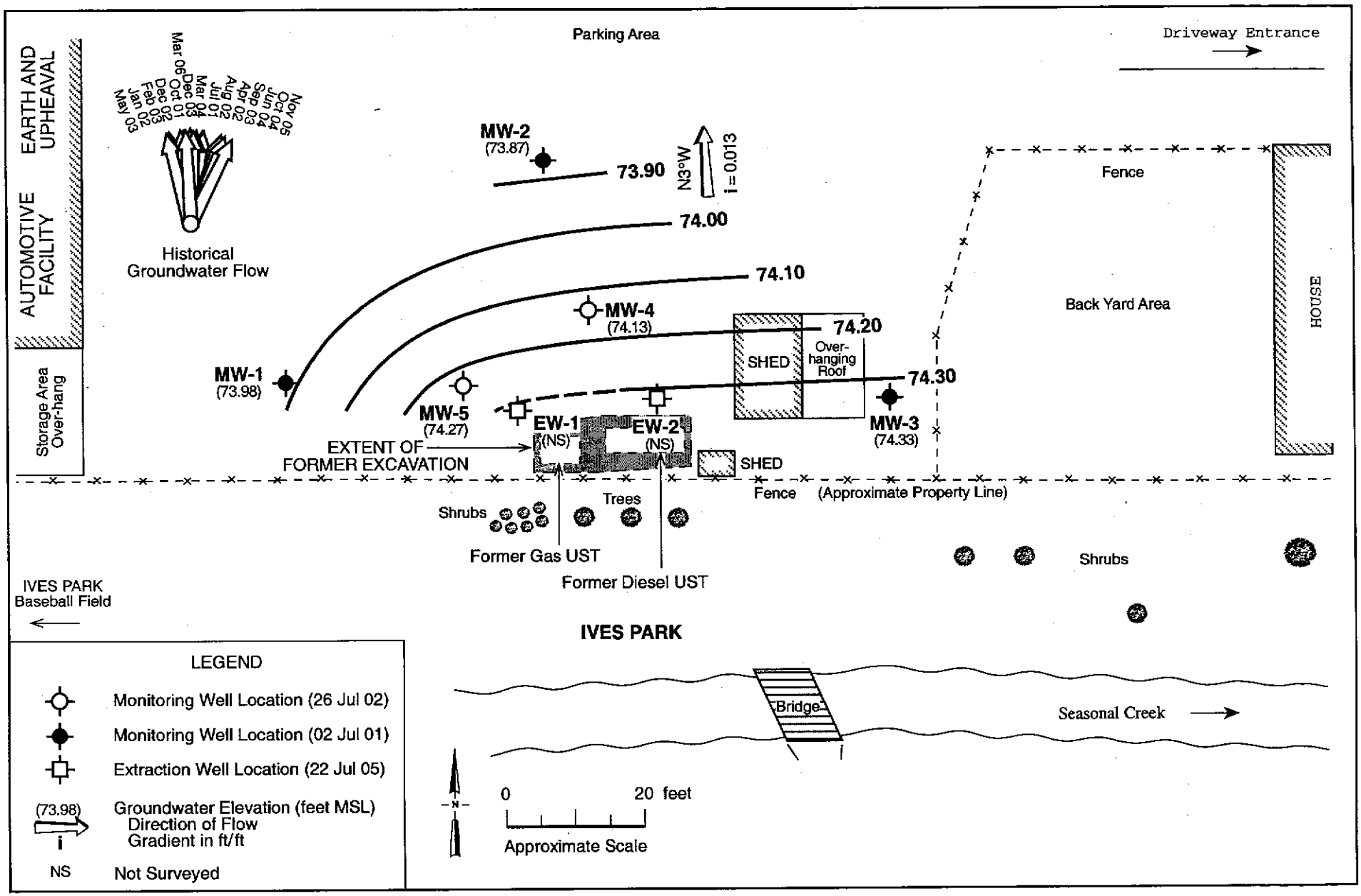
SITE PLAN

198 High Street
Sebastopol, California

FIGURE
2

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
0369, 001.00	EC&A, Richard Ely	July 2001	August 2005

(TRACE#416/RG/22Aug05)



(TRACE#415/RG/19May06)

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GROUNDWATER ELEVATION MAP, 09 March 2006

198 High Street
Sebastopol, California

FIGURE
3

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
0369, 001.00	EC&A, E.J. VandenBosch	July 2001	May 2006

Table 1. Water Level Data
198 High Street, Sebastopol, California

Sample ID	Date	TOC Elevation feet	DTW feet	Groundwater Elevation feet
MW-1	07/12/01	94.38	18.92	75.46
MW-2		93.15	17.88	75.27
MW-3		90.26	14.78	75.48
Gradient: Due North; 0.006 ft/ft				
MW-1	10/08/01	94.38	20.12	74.26
MW-2		93.15	19.08	74.07
MW-3		90.26	15.96	74.30
Gradient = N03°W; 0.006 ft/ft				
MW-1	01/08/02	94.38	19.49	74.89
MW-2		93.15	18.52	74.63
MW-3		90.26	15.13	75.13
Gradient = N13°W; 0.011 ft/ft				
MW-1	04/03/02	94.38	19.00	75.38
MW-2		93.15	18.10	75.05
MW-3		90.26	14.97	75.29
Gradient = N08°E; 0.0087 ft/ft				
MW-1	08/14/02	94.38	20.43	73.95
MW-2		93.15	19.43	73.72
MW-3		90.26	16.31	73.95
MW-4		92.57	18.71	73.86
MW-5		92.98	19.07	73.91
Gradient = N04°E; 0.036 ft/ft				
MW-1	11/06/02	94.38	21.81	72.57
MW-2		93.15	20.77	72.38
MW-3 *		90.26	20.77	69.49
MW-4		92.57	20.05	72.52
MW-5		92.98	20.41	72.57
Gradient not calculated*				

Table 1. Water Level Data
198 High Street, Sebastopol, California

Sample ID	Date	TOC Elevation feet	DTW feet	Groundwater Elevation feet
MW-1	12/03/02	94.38	22.06	72.32
MW-2		93.15	21.04	72.11
MW-3		90.26	17.89	72.37
MW-4		92.57	20.30	72.27
MW-5		92.98	20.67	72.31
Gradient = N05°W, 0.0067 ft/ft				
MW-1	02/14/03	94.38	21.49	72.89
MW-2		93.15	20.47	72.68
MW-3		90.26	17.29	72.97
MW-4		92.57	19.72	72.85
MW-5		92.98	20.08	72.90
Gradient = N06°W, 0.0071 ft/ft				
MW-1	05/21/03	94.38	22.00	72.38
MW-2		93.15	20.94	72.21
MW-3		90.26	17.72	72.54
MW-4		92.57	20.19	72.38
MW-5		92.98	20.57	72.41
Gradient = N13°W, 0.0074 ft/ft				
MW-1	09/15/03	94.38	21.79	72.59
MW-2		93.15	20.81	72.34
MW-3		90.26	17.74	72.52
MW-4		92.57	20.10	72.47
MW-5		92.98	20.43	72.55
Gradient = N09°E, 0.0061 ft/ft				

Table 1. Water Level Data
198 High Street, Sebastopol, California

Sample ID	Date	TOC Elevation feet	DTW feet	Groundwater Elevation feet
MW-1	12/15/03	94.38	21.51	72.87
MW-2		93.15	20.59	72.56
MW-3		90.26	17.44	72.82
MW-4		92.57	19.82	72.75
MW-5		92.98	20.14	72.84
Gradient = N05°E, 0.008 ft/ft				
MW-1	03/10/04	94.38	20.13	74.25
MW-2		93.15	19.22	73.93
MW-3		90.26	16.02	74.24
MW-4		92.57	18.44	74.13
MW-5		92.98	18.75	74.23
Gradient = N04°E, 0.009 ft/ft				
MW-1	06/29/04	94.38	20.13	74.25
MW-2		93.15	19.23	73.92
MW-3		90.26	16.23	74.03
MW-4		92.57	18.52	74.05
MW-5		92.98	18.82	74.16
Gradient = N20°E, 0.008 ft/ft				
MW-1	10/15/04	94.38	21.78	72.60
MW-2		93.15	20.85	72.30
MW-3		90.26	17.84	72.42
MW-4		92.57	20.14	72.43
MW-5		92.98	20.44	72.54
Gradient = N19°E, 0.007ft/ft				

Table 1. Water Level Data
198 High Street, Sebastopol, California

Sample ID	Date	TOC Elevation feet	DTW feet	Groundwater Elevation feet
MW-1	03/04/05	94.38	21.60	72.78
MW-2		93.15	20.79	72.36
MW-3		90.26	17.52	72.74
MW-4		92.57	19.98	72.59
MW-5		92.98	22.80	70.18
Gradient = N03°E; 0.012 ft/ft				
MW-1	07/29/05	94.38	21.54	72.84
MW-2		93.15	20.69	72.46
MW-3		90.26	17.66	72.60
MW-4		92.57	19.98	72.59
MW-5		92.98	20.21	72.77
EW-1		NS	19.51	---
EW-2		NS	19.48	---
Gradient = N21°E; 0.009 ft/ft				
MW-1	11/07/05	94.38	21.68	72.70
MW-2		93.15	20.85	72.30
MW-3		90.26	17.84	72.42
MW-4		92.57	20.12	72.45
MW-5		92.98	20.37	72.61
EW-1		NS	19.64	---
EW-2		NS	19.61	---
Gradient = N24°E; 0.008 ft/ft				
MW-1	**03/09/06**	**94.38**	**20.40**	**73.98**
MW-2		**93.15**	**19.28**	**73.87**
MW-3		**90.26**	**15.93**	**74.33**
MW-4		**92.57**	**18.44**	**74.13**
MW-5		**92.98**	**18.71**	**74.27**
EW-1		**NS**	**17.92**	**---**
EW-2		**NS**	**17.80**	**---**
Gradient = N03°W; 0.013 ft/ft				

Notes

TOC: Top of casing elevation measured relative to mean sea level (msl)
DTW: Depth to water from TOC
NS: Not surveyed
*: Due to anomalous data for MW-3, November 6, 2002 DTW measurements were not used to calculate the groundwater-flow direction and gradient. Measurements were taken again on December 3, 2002 and used for gradient evaluation.

0369\table 1

Table 2. Analytical Results - Groundwater Samples from Monitoring and Extraction Wells
198 High Street, Sebastopol, California

Well ID	Sample Date	DTW feet	TPHg µg/l	TPHd µg/l	Benzene µg/l	Toluene µg/l	Ethyl-benzene µg/l	Xylenes µg/l	MTBE µg/l	Other Oxygenates µg/l	EDB µg/l	1,2-DCA µg/l
MW-1	07/12/01	18.92	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND	ND	ND
	10/08/01	20.12	ND<50	ND<50	ND<0.5	0.70	0.68	2.1	ND<1.0	ND	ND	ND
	01/08/02	19.49	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND	ND	ND
	04/03/02	19.00	ND<50	ND<50	ND<0.5	0.53	ND<0.5	1.4	ND<0.5	ND	ND	ND
	08/14/02	20.43	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	ND<0.5	ND<0.5
	11/06/02	21.81	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	ND<0.5	ND<0.5
	02/14/03	21.49	ND<50	NA	0.68	ND<0.5	ND<0.5	0.85	ND<0.5	ND	ND<0.5	ND<0.5
	09/15/03	21.79	ND<50	NA	ND<0.5	ND<0.5	1.8	2.8	NA	NA	NA	NA
	03/10/04	20.13	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
	10/15/04	21.78	300 [a]	NA	8.2	49	11	48	NA	NA	NA	NA
	03/04/05	21.60	130 [a]	NA	2.1	13	3.1	12	NA	NA	NA	NA
	07/29/05	21.54	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
Post-HVDPE Samples	11/07/05	21.68	ND<50	NA	1.1	0.88	0.91	1.9	NA	NA	NA	NA
	03/09/06	**20.40**	**ND<50**	**NA**	**0.90**	**ND<0.5**	**ND<0.5**	**0.58**	**NA**	**NA**	**NA**	**NA**
MW-2 [†]	07/12/01	17.88	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND	ND	2.1
	10/08/01	19.08	ND<50	ND<50	ND<0.5	ND<0.5	0.62	1.1	ND<1.0	ND	ND	ND
	01/08/02	18.52	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND	ND	ND
	04/03/02	18.10	ND<50	ND<50	ND<0.5	0.63	0.58	1.6	ND<0.5	ND	ND	ND
	08/14/02	19.43	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	ND<0.5	ND<0.5
	11/06/02	20.77	ND<50	ND<50	ND<0.5	0.69	ND<0.5	1.4	ND<0.5	ND	ND<0.5	ND<0.5

Table 2. Analytical Results - Groundwater Samples from Monitoring and Extraction Wells
198 High Street, Sebastopol, California

Well ID	Sample Date	DTW feet	TPHg µg/l	TPHd µg/l	Benzene µg/l	Toluene µg/l	Ethyl-benzene µg/l	Xylenes µg/l	MTBE µg/l	Other Oxygenates µg/l	EDB µg/l	1,2-DCA µg/l
MW-2 † continued	02/14/03	20.47	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	ND<0.5	ND<0.5
	09/15/03	20.81	ND<50	NA	ND<0.5	ND<0.5	0.97	1.7	NA	NA	NA	NA
	03/10/04	19.22	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
	10/15/04	20.85	51 [a]	NA	ND<0.5	1.7	0.55	2.5	NA	NA	NA	NA
	07/29/05	20.69	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
Post-HVDPE Samples	11/07/05	20.85	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
	03/09/06	**19.28**	**ND<50**	**NA**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**NA**	**NA**	**NA**	**NA**
MW-3 †	07/12/01	14.78	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND	ND	ND
	10/08/01	15.96	ND<50	ND<50	ND<0.5	0.70	0.68	2.1	ND<1.0	ND	ND	ND
	01/08/02	15.13	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND	ND	ND
	04/03/02	14.97	ND<50	ND<50	ND<0.5	0.54	ND<0.5	1.3	ND<0.5	ND	ND	ND
	08/14/02	16.31	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	ND<0.5	ND<0.5
	11/06/02	20.77	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	ND<0.5	ND<0.5
	02/14/03	17.29	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	ND<0.5	ND<0.5
	09/15/03	17.74	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
	03/10/04	16.02	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
	10/15/04	17.84	ND<50	NA	ND<0.5	3.4	0.96	4.2	NA	NA	NA	NA
	07/29/05	17.66	120 [b]	NA	ND<0.5	9.3	3.3	13	NA	NA	NA	NA
Post-HVDPE Samples	11/07/05	17.84	ND<50 [i]	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
	03/09/06	**15.93**	**ND<50**	**NA**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**NA**	**NA**	**NA**	**NA**

Table 2. Analytical Results - Groundwater Samples from Monitoring and Extraction Wells
198 High Street, Sebastopol, California

Well ID	Sample Date	DTW feet	TPHg µg/l	TPHd µg/l	Benzene µg/l	Toluene µg/l	Ethyl-benzene µg/l	Xylenes µg/l	MTBE µg/l	Other Oxygenates µg/l	EDB µg/l	1,2-DCA µg/l
MW-4 †	08/14/02	18.71	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	ND<0.5	ND<0.5
	11/06/02	20.05	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	ND<0.5	ND<0.5
	02/14/03	19.72	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	ND<0.5	ND<0.5
	05/21/03	20.19	82 [a]	ND<50	3.6	3.1	2.5	5.8	ND<0.5	ND	ND<0.5	ND<0.5
	09/15/03	20.10	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	0.73	NA	NA	NA	NA
	12/15/03	19.82	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
	03/10/04	18.44	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
	06/29/04	18.52	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
	10/15/04	20.14	ND<50	NA	ND<0.5	3.5	1.1	4.7	NA	NA	NA	NA
	07/29/05	19.98	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
Post-HVDPE Samples	11/07/05	20.12	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	1.2	NA	NA	NA	NA
	03/09/06	**18.44**	**ND<50**	**NA**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**NA**	**NA**	**NA**	**NA**
MW-5	08/14/02	19.07	1100 [a]	140 [d]	13	12	3.6	50	ND<0.5	ND	ND<0.5	ND<0.5
	11/06/02	20.41	470 [a]	71 [d]	9.9	7.1	2.2	30	ND<0.5	ND	ND<0.5	ND<0.5
	02/14/03	20.08	350 [a]	NA	9.6	7.6	11	24	ND<0.5	ND	ND<0.5	ND<0.5
	05/21/03	20.57	360 [a]	ND<50	9.7	3.1	12	18	ND<0.5	ND	ND<0.5	ND<0.5
	09/15/03	20.43	540 [a]	81 [d]	12	2.6	21	32	NA	NA	NA	NA
	12/15/03	20.14	72 [a]	ND<50	0.93	ND<0.5	ND<0.5	2.8	NA	NA	NA	NA
	03/10/04	18.75	200 [a]	83 [d]	4.7	1.2	7.8	12	NA	NA	NA	NA
	06/29/04	18.82	210 [a]	ND<50	3.1	0.61	6.5	6.3	NA	NA	NA	NA

Table 2. Analytical Results - Groundwater Samples from Monitoring and Extraction Wells
198 High Street, Sebastopol, California

Well ID	Sample Date	DTW feet	TPHg µg/l	TPHd µg/l	Benzene µg/l	Toluene µg/l	Ethyl-benzene µg/l	Xylenes µg/l	MTBE µg/l	Other Oxygenates µg/l	EDB µg/l	1,2-DCA µg/l
MW-5 continued	10/15/04	20.44	170 [a]	ND<50	3.9	21	5.6	22	NA	NA	NA	NA
	03/04/05	22.80	120 [a]	NA	2.3	ND<0.5	3.8	6.0	NA	NA	NA	NA
	07/29/05	20.21	66 [b]	NA	ND<0.5	8.2	2.8	12	NA	NA	NA	NA
Post-HVDPE Samples	11/07/05	20.37	ND<50	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
	03/09/06	**18.71**	**ND<50**	**NA**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**NA**	**NA**	**NA**	**NA**
EW-1	07/29/05	19.51	3500 [a]	290 [d]	26	300	75	370	NA	NA	NA	NA
Post-HVDPE Samples	11/07/05	19.64	320 [b]	280 [d,f,g]	ND<0.5	3.8	1.2	53	NA	NA	NA	NA
	03/09/06	**17.92**	**730 [b,m]**	**85 [d]**	**0.58**	**32**	**13**	**150**	**NA**	**NA**	**NA**	**NA**
EW-2	07/29/05	19.48	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
Post-HVDPE Samples	11/07/05	19.61	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
	03/09/06	**17.80**	**ND<50**	**ND<50**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**NA**	**NA**	**NA**	**NA**

Notes

TPHg: Total petroleum hydrocarbons as gasoline
TPHd: Total petroleum hydrocarbons as diesel
MTBE: Methyl tert-butyl ether; analyzed by Analytical Method SW8260B unless noted otherwise
EDB: 1,2-dibromoethane
1,2-DCA: 1,2-dichloroethane
µg/l: Micrograms per liter
ND: Not detected above the reporting limit
NA: Not analyzed
NS: Not sampled

†: MW-2, MW-3 and MW-4 are sampled semi-annually at seasonally low and high water-table levels
a: Unmodified or weakly modified gasoline is significant
b: Heavier gasoline range compounds are significant (aged gasoline?)
d: Gasoline range compounds are significant
f: One to a few isolated peaks present
g: Oil range compounds are significant
i: Liquid sample that contains greater than ~1 vol. % sediment
m: No recognizable pattern

Appendix A

Groundwater Field Logs

DAILY FIELD RECORD

Page 1 of 1

Project and Task Number: 0369	Date: 3/9/06
Project Name: EARTH IN OPERATION	Field Activity: QUARTERLY GROUNDWATER MONITORING
Location: 198 HIGH ST	Weather:
Time of OVM Calibration:	

PERSONNEL

Name	Company	Time In	Time Out
CHRIS	ECHA		
ROONEY	ECHA		

NUMBER	DESCRIPTION OF EQUIPMENT	LOCATION
215	DRUMS	UNDER SHED
	BROUGHT 2 x 55 DRUMS	7 BAILERS

TIME	
	LOAD ORDER 2, 3, EW-2, 1, 4, 5, EW-1
	DEPART
	ONSITE, OPEN ALL wells & SET UP DECON
	TAKE DTW's MW-1 20.4 MW-3 15.93 MW-5 18.71 EW-2 17.8
	MW-2 19.78 MW-4 18.14 EW-1 17.92
	CALCULATE GWF logs AND BEGIN PURGING wells IN ORDER
	ALLOW TIME FOR wells TO RECHARGE
	TAKE POST PURGE DTW's
	BEGIN Collecting SAMPLES IN ORDER
	close & LOCK wells
	CLEAN UP SITE
	DEPART.

forms\daily field record

LEDD CLARK & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

FIELD LOG

☒ GROUNDWATER	☐ SURFACE WATER	☐ DOMESTIC WATER	☐ IRRIGATION WATER	☐ WELL DEVELOPMENT

Project No: 0369	Field point name: MW - 1
Global ID: T0609700517	Well depth from TOC: 25
Project location: 198 HIGH STREET	Well diameter: ☒ 2" ☐ 4 " ☐ 6" ☐ Other:
Date: 3/09/06	Product level from TOC: ND
Time: 11:00	Water level from TOC: 20.90
Recorded by: CHRIS S / RODNEY	Screened interval: 10-25
Purge time (duration):	Well elevation (TOC): 94.38

WEATHER

Wind: 0 - 10 mph	Precip. in last 5 days: yes

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

☒ 2" well = 0.17 gal/ft 4.10	☐ 6" well = 1.47 gal/ft	Gallons in 1 well volume:	4.69
☐ 4" well = 0.66 gal/ft	☐ " well = gal/ft	Total gallons removed: 21	Well volumes removed: 3

CALIBRATION

Parameter	Time	Calibration	Before Sampling	Time	After Sampling
EC:					

FIELD MEASUREMENTS

Time	pH	EC (x1000)	Temp °F	Case Volumes/ Gallons	Appearance
	6.89	413	60.5	1 / 1.7	Low TURB, NO odor, no sheen
	6.67	425	60.6	2 / 1.4	
	6.60	424	60.1	3 / 2.1	Rand dry @ 2.1
				/	

Notes:

Water level after purging below TOC: DRY	80% of original water level below TOC: Y
Water level before sampling below TOC: 21	
Appearance of sample:	Time: 325

☐ Bailer:	Type:	GPM:	☒ Pump: ES-60	Type: Submersible	GPM: 1-2
☐ Dedicated:	Type:	GPM:	Decontamination method: Liquinox wash, double rinse		

Sample analysis:	☒ TPHg	☐ TPHd	☐ TPH	☒ BTEX	☐ 7 oxygenates	☐ Lead scavengers	☐ VOCs	☐ Nitrates
EPA Method:								

Other:

LABORATORY: ☒ McCampbell Analytical ☐ Other:

EDD CLARK & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

FIELD LOG

☒ GROUNDWATER	☐ SURFACE WATER	☐ DOMESTIC WATER	☐ IRRIGATION WATER	☐ WELL DEVELOPMENT

Project No: 0369	Field point name: MW - 2
Global ID: T06097 00517	Well depth from TOC: 25
Project location: 198 HIGH Street	Well diameter: ☒ 2" ☐ 4 " ☐ 6" ☐ Other:
Date: 3/9/06	Product level from TOC: ND
Time: 10:00	Water level from TOC: 19.28
Recorded by: Chris S / Rodney	Screened interval: 10-25
Purge time (duration):	Well elevation (TOC): 93.15

WEATHER

Wind: 0 - 10 mph	Precip. in last 5 days: yes

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

☒ 2" well = 0.17 gal/ft 5.72	☐ 6" well = 1.47 gal/ft	Gallons in 1 well volume: .97	
☐ 4" well = 0.66 gal/ft	☐ " well = gal/ft	Total gallons removed: 3	Well volumes removed: 3

CALIBRATION

Parameter	Time	Calibration	Before Sampling	Time	After Sampling
EC:					

FIELD MEASUREMENTS

Time	pH	EC (x1000)	Temp °F	Case Volumes/ Gallons	Appearance
	6.96	884	63.7	1 / 1	bowtub no odor no sheen
	6.91	859	64	2 / 2	
	6.92	811	64	3 / 3	
				/	

Notes:

Water level after purging below TOC:	80% of original water level below TOC: 4
Water level before sampling below TOC: 19.5	
Appearance of sample:	Time: 250

☐ Bailer:	Type:	GPM:	☒ Pump: ES-60	Type: Submersible	GPM: 1 (2)
☐ Dedicated:	Type:	GPM:	Decontamination method: Liquinox wash, double rinse		

Sample analysis:	☒ TPHg	☐ TPHd	☐ TPH	☒ BTEX	☐ 7 oxygenates	☐ Lead scavengers	☐ VOCs	☐ Nitrates
EPA Method:								

Other:

LABORATORY: ☒ McCampbell Analytical ☐ Other:

EDD CLARK & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

FIELD LOG

☒ GROUNDWATER	☐ SURFACE WATER	☐ DOMESTIC WATER	☐ IRRIGATION WATER	☐ WELL DEVELOPMENT

Project No: 0369	Field point name: MW-3
Global ID: T0600700517	Well depth from TOC: 25
Project location: 198 HIGH STREET	Well diameter: ☒ 2" ☐ 4 " ☐ 6" ☐ Other:
Date: 3/9/06	Product level from TOC: ND
Time: 11:00	Water level from TOC: 15.93
Recorded by: CHRIS S / RODNEY	Screened interval: 10-25
Purge time (duration):	Well elevation (TOC): 90.26

WEATHER

Wind: 0 - 10 mph	Precip. in last 5 days: yes

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

☒ 2" well = 0.17 gal/ft 9.07	☐ 6" well = 1.47 gal/ft	Gallons in 1 well volume: 1.54	
☐ 4" well = 0.66 gal/ft	☐ " well = gal/ft	Total gallons removed: 4.5	Well volumes removed: 3

CALIBRATION

Parameter	Time	Calibration	Before Sampling	Time	After Sampling
EC:					

FIELD MEASUREMENTS

Time	pH	EC (x1000)	Temp °F	Case Volumes/ Gallons	Appearance: Low turb no odor no sheen
	7.13	572	59.8	1 / 1.5	
	7.10	587	59.7	2 / 3	
	7.08	600	59.8	3 / 4.5	
				/	

Notes:

Water level after purging below TOC: 80% of original water level below TOC: Y

Water level before sampling below TOC: 16

Appearance of sample: Time: 300

☐ Bailer:	Type:	GPM:	☒ Pump: ES-60	Type: Submersible	GPM: 1-2
☐ Dedicated:	Type:	GPM:	Decontamination method: Liquinox wash, double rinse		

Sample analysis:	☒ TPHg	☐ TPHd	☐ TPH	☒ BTEX	☐ 7 oxygenates	☐ Lead scavengers	☐ VOCs	☐ Nitrates
EPA Method:								

Other:

LABORATORY: ☒ McCampbell Analytical ☐ Other:

EDD CLARK & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

FIELD LOG

☒ GROUNDWATER	☐ SURFACE WATER	☐ DOMESTIC WATER	☐ IRRIGATION WATER	☐ WELL DEVELOPMENT

Project No: 0369	Field point name: MW - 4
Global ID: T0600700517	Well depth from TOC: 25
Project location: 198 HIGH STREET	Well diameter: ☒ 2" ☐ 4 " ☐ 6" ☐ Other:
Date: 3/9/06	Product level from TOC: ND
Time: 11:00	Water level from TOC: 18.44
Recorded by: CHRIS J / RODNEY	Screened interval: 10-25
Purge time (duration):	Well elevation (TOC): 92.57

WEATHER

Wind: 0 - 10 mph	Precip. in last 5 days: yes

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

☒ 2" well = 0.17 gal/ft 6.5	☐ 6" well = 1.47 gal/ft	Gallons in 1 well volume: 1.11	
☐ 4" well = 0.66 gal/ft	☐ " well = gal/ft	Total gallons removed: 3.3	Well volumes removed: 3

CALIBRATION

Parameter	Time	Calibration	Before Sampling	Time	After Sampling
EC:					

FIELD MEASUREMENTS

Time	pH	EC (x1000)	Temp °F	Case Volumes/ Gallons	Appearance
	6.99	877	61.4	1 / 1.1	Low turb no oder no sheen
	6.53	882	62.0	2 / 2.2	
	6.61	821	62.1	3 / 3.3	
				/	

Notes:

Water level after purging below TOC:	80% of original water level below TOC: 4
Water level before sampling below TOC: 18.5	
Appearance of sample:	Time: 335

☐ Bailer:	Type:	GPM:	☒ Pump: ES-40	Type: Submersible	GPM: 1 - 2
☐ Dedicated:	Type:	GPM:	Decontamination method: Liquinox wash, double rinse		

Sample analysis:	☒ TPHg	☐ TPHd	☐ TPH	☒ BTEX	☐ 7 oxygenates	☐ Lead scavengers	☐ VOCs	☐ Nitrates
EPA Method:								

Other:

LABORATORY: ☒ McCampbell Analytical ☐ Other:

EDD CLARK & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

FIELD LOG

☒ GROUNDWATER	☐ SURFACE WATER	☐ DOMESTIC WATER	☐ IRRIGATION WATER	☐ WELL DEVELOPMENT

Project No: 0369	Field point name: MW-5
Global ID: T0600700517	Well depth from TOC: 25
Project location: 198 HIGH STREET	Well diameter: ☒ 2" ☐ 4 " ☐ 6" ☐ Other:
Date: 3/9/06	Product level from TOC: ND
Time: 11:00	Water level from TOC: 18.71
Recorded by: CHRIS S / RODNEY	Screened interval: 10-25
Purge time (duration):	Well elevation (TOC): 92.98

WEATHER

Wind: 0 - 10 mph	Precip. in last 5 days: yes

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

☒ 2" well = 0.17 gal/ft 6.79	☐ 6" well = 1.47 gal/ft	Gallons in 1 well volume: 1.06	
☐ 4" well = 0.66 gal/ft	☐ " well = gal/ft	Total gallons removed: 3.3	Well volumes removed: 3

CALIBRATION

Parameter	Time	Calibration	Before Sampling	Time	After Sampling
EC:					

FIELD MEASUREMENTS

Time	pH	EC (x1000)	Temp °F	Case Volumes/ Gallons	Appearance
	6.7	654	61.1	1 / 1.1	Low trub no odor no sheen
	6.8	697	61.7	2 / 2.7	
	6.8	725	61.8	3 / 3.3	
				/	

Notes:

Water level after purging below TOC: 80% of original water level below TOC: Y

Water level before sampling below TOC: 18.75

Appearance of sample: Time: 345

☐ Bailer:	Type:	GPM:	☒ Pump: ES-40	Type: Submersible	GPM: 1-2
☐ Dedicated:	Type:	GPM:	Decontamination method: Liquinox wash, double rinse		

Sample analysis:	☒ TPHg	☐ TPHd	☐ TPH	☒ BTEX	☐ 7 oxygenates	☐ Lead scavengers	☐ VOCs	☐ Nitrates
EPA Method:								

Other:

LABORATORY: ☒ McCampbell Analytical ☐ Other:

EDD CLARK & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

FIELD LOG

☒ GROUNDWATER	☐ SURFACE WATER	☐ DOMESTIC WATER	☐ IRRIGATION WATER	☐ WELL DEVELOPMENT

Project No: 0369	Field point name: EW - 1
Global ID: T0600700517	Well depth from TOC: 30
Project location: 198 HIGH STREET	Well diameter: ☐ 2" ☒ 4 " ☐ 6" ☐ Other:
Date: 3/9/06	Product level from TOC: ND
Time: 11:00	Water level from TOC: 17.92
Recorded by: Chris S / Rodney	Screened interval: 10-30
Purge time (duration):	Well elevation (TOC): ?

WEATHER

Wind: 0 - 10 mph	Precip. in last 5 days: yes

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

☐ 2" well = 0.17 gal/ft 9	☐ 6" well = 1.47 gal/ft	Gallons in 1 well volume: 7.97	
☒ 4" well = 0.66 gal/ft 12.08	☐ " well = gal/ft	Total gallons removed: 24	Well volumes removed: 3

CALIBRATION

Parameter	Time	Calibration	Before Sampling	Time	After Sampling
EC:					

FIELD MEASUREMENTS

Time	pH	EC (x1000)	Temp °F	Case Volumes/ Gallons	Appearance
	7.10	763.7	61.8	1 / 8	LOW TURB HC/SULFUR ODOR
	7.32	761.1	62.0	2 / 16	NO SHEEN
	7.27	741.3	62.3	3 / 24	
				/	

Notes:

Water level after purging below TOC: 80% of original water level below TOC: y

Water level before sampling below TOC: 18

Appearance of sample: Time: 400

☐ Bailer:	Type:	GPM:	☒ Pump: ES-60	Type: Submersible	GPM: 1-2
☐ Dedicated:	Type:	GPM:	Decontamination method: Liquinox wash, double rinse		

Sample analysis:	☒ TPHg	☐ TPHd	☐ TPH	☒ BTEX	☐ 7 oxygenates	☐ Lead scavengers	☐ VOCs	☐ Nitrates
EPA Method:								

Other:

LABORATORY: ☒ McCampbell Analytical ☐ Other:

EDD CLARK & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

FIELD LOG

☒ GROUNDWATER	☐ SURFACE WATER	☐ DOMESTIC WATER	☐ IRRIGATION WATER	☐ WELL DEVELOPMENT

Project No: 0369	Field point name: EW-2
Global ID: T06097 00517	Well depth from TOC: 30
Project location: 198 HIGH STREET	Well diameter: ☐ 2" ☒ 4 " ☐ 6" ☐ Other:
Date: 3/9/06	Product level from TOC: ND
Time: 11:00	Water level from TOC: 17.80
Recorded by: CHRIS J / RODNEY	Screened interval: 10-30
Purge time (duration):	Well elevation (TOC):

WEATHER

Wind: 0 - 10 mph	Precip. in last 5 days: yes

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

☐ 2" well = 0.17 gal/ft	☐ 6" well = 1.47 gal/ft	Gallons in 1 well volume: 8.05	
☒ 4" well = 0.66 gal/ft 12.2	☐ " well = gal/ft	Total gallons removed: 24	Well volumes removed: 3

CALIBRATION

Parameter	Time	Calibration	Before Sampling	Time	After Sampling
EC:					

FIELD MEASUREMENTS

Time	pH	EC (x1000)	Temp °F	Case Volumes/ Gallons	Appearance
	6.88	508.7	60.9	1 / 8	LOW TURB NO ODOR NO SHEEN
	7.48	<545.4	60.9	2 / 16	
	7.41	558.3	61.5	3 / 24	
				/	

Notes:

Water level after purging below TOC:	80% of original water level below TOC: Y
Water level before sampling below TOC: 17.8	
Appearance of sample:	Time: 315

☐ Bailer:	Type:	GPM:	☒ Pump: ES-60	Type: Submersible	GPM: 1-2
☐ Dedicated:	Type:	GPM:	Decontamination method: Liquinox wash, double rinse		

Sample analysis:	☒ TPHg	☐ TPHd	☐ TPH	☒ BTEX	☐ 7 oxygenates	☐ Lead scavengers	☐ VOCs	☐ Nitrates
EPA Method:								

Other:

LABORATORY: ☒ McCampbell Analytical ☐ Other:

Appendix B

Analytical Laboratory Report

MAR 2 1 2006

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

Edd Clark & Associates, Inc. 320 Professional Center Ste. 215 Rohnert Park, CA 94928	Client Project ID: #0369; Earth In Upheaval	Date Sampled: 03/09/06
		Date Received: 03/10/06
	Client Contact: Chris Janiszewski	Date Reported: 03/14/06
	Client P.O.:	Date Completed: 03/14/06

WorkOrder: 0603177

March 14, 2006

Dear Chris:

Enclosed are:

1). the results of 7 analyzed samples from your **#0369; Earth In Upheaval project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

Edd Clark & Associates, Inc.	Client Project ID: #0369; Earth In Upheaval	Date Sampled: 03/09/06
320 Professional Center Ste. 215		Date Received: 03/10/06
Rohnert Park, CA 94928	Client Contact: Chris Janiszewski	Date Extracted: 03/11/06-03/13/06
	Client P.O.:	Date Analyzed: 03/11/06-03/13/06

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0603177

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	ND	---	0.90	ND	ND	0.58	1	106
002A	MW-2	W	ND	---	ND	ND	ND	ND	1	103
003A	MW-3	W	ND	---	ND	ND	ND	ND	1	111
004A	MW-4	W	ND	---	ND	ND	ND	ND	1	107
005A	MW-5	W	ND	---	ND	ND	ND	ND	1	99
006A	EW-1	W	730,b,m	---	0.58	32	13	150	1	105
007A	EW-2	W	ND	---	ND	ND	ND	ND	1	102

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

Edd Clark & Associates, Inc. 320 Professional Center Ste. 215 Rohnert Park, CA 94928	Client Project ID: #0369; Earth In Upheaval	Date Sampled: 03/09/06
		Date Received: 03/10/06
	Client Contact: Chris Janiszewski	Date Extracted: 03/10/06
	Client P.O.:	Date Analyzed: 03/11/06

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel*

Extraction method: SW3510C Analytical methods: SW8015C Work Order: 0603177

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0603177-006B	EW-1	W	85,d	1	92
0603177-007B	EW-2	W	ND	1	104

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range/jet fuel range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0603177

EPA Method: SW8021B/8015Cm **Extraction: SW5030B** **BatchID: 20694** **Spiked Sample ID: 0603193-021A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex)£	ND	60	106	106	0	106	106	0	70 - 130	70 - 130
MTBE	ND	10	90.1	90.4	0.273	88.9	91.3	2.66	70 - 130	70 - 130
Benzene	ND	10	91.5	88.9	2.92	93.5	99.9	6.59	70 - 130	70 - 130
Toluene	ND	10	93.9	85.1	9.88	94.6	99	4.53	70 - 130	70 - 130
Ethylbenzene	ND	10	96.6	93.9	2.88	96.9	99.2	2.34	70 - 130	70 - 130
Xylenes	ND	30	99.7	99.3	0.335	96	100	4.08	70 - 130	70 - 130
%SS:	99	10	99	98	0.869	101	104	2.68	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 20694 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0603177-001A	3/09/06 3:25 PM	3/11/06	3/11/06 9:50 AM	0603177-002A	3/09/06 2:50 PM	3/13/06	3/13/06 10:41 PM
0603177-003A	3/09/06 3:00 PM	3/11/06	3/11/06 10:54 AM	0603177-004A	3/09/06 3:35 PM	3/11/06	3/11/06 11:26 AM
0603177-005A	3/09/06 3:45 PM	3/13/06	3/13/06 11:14 PM	0603177-006A	3/09/06 4:00 PM	3/11/06	3/11/06 12:31 PM
0603177-007A	3/09/06 3:15 PM	3/11/06	3/11/06 1:03 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not applicable or not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

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Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0603177

EPA Method: SW8015C	Extraction: SW3510C				BatchID: 20690			Spiked Sample ID: N/A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(d)	N/A	1000	N/A	N/A	N/A	111	108	2.72	N/A	70 - 130
%SS:	N/A	2500	N/A	N/A	N/A	106	107	0.118	N/A	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 20690 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0603177-006B	3/09/06 4:00 PM	3/10/06	3/11/06 9:48 AM	0603177-007B	3/09/06 3:15 PM	3/10/06	3/11/06 9:48 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

Edd Clark & Associates, Inc.
Environmental Consultants

Q603177
ECAR

Chain of Custody Report

P.O. Box 3039, Rohnert Park, CA 94927
Tel: (707) 792-9500 (800) 474-1448 Fax: (707) 792-9504

E-mail in EDF for Upload to Geotracker: Yes ☒ No ☐ Initials CJ

Samplers Signature: CHRIS JANISZEWSKI

EC&A job # 0369

Global I.D. # T0609700517

Facility Name & Location: EARTH IN UNDERWAY 198 HIGH ST SEBASTOPOL CA

Field Point Name	Date	Time	Sample ID (depth)	Sample Type	Media	# of Items	Analysis: TPHg BTEX	Analysis: TPHd	Remarks
MW-1	3/9/06	325		discrete	W	2/3	X		
MW-2		250				3	X		
MW-3		300				3	X		
MW-4		335				3	X		
MW-5		345				3	X		
EW-1		400				2/3	X	X	
EW-2	↓	315		↓	↓	2/3	X	X	

ICE/T ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB
PRESERVATION: VOAS ✓ | O&G | METALS | OTHER ✓

Relinquished by:	Date:	Time:	Received by:	Relinquished by:	Date:	Time:	Received by:
	3/9/06	1110			3/10/06	315	Kathleen Owen
Relinquished by:	Date:	Time:	Received by:	Relinquished by:	Date:	Time:	Received by:

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0603177 **ClientID: ECAR** **EDF: YES**

Report to:
Chris Janiszewski
Edd Clark & Associates, Inc.
320 Professional Center Ste. 215
Rohnert Park, CA 94928
TEL: (707) 792-9500
FAX: (707) 792-9504
ProjectNo: #0369; Earth In Upheaval
PO:

Bill to:
Accounts Payable
Edd Clark & Associates, Inc.
320 Professional Center Ste.215
Rohnert Park, CA 94928

Requested TAT: 5 days
Date Received: 03/10/2006
Date Printed: 03/13/2006

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0603177-001	MW-1	Water	3/9/06 3:25:00 PM	☐	A	A										
0603177-002	MW-2	Water	3/9/06 2:50:00 PM	☐	A											
0603177-003	MW-3	Water	3/9/06 3:00:00 PM	☐	A											
0603177-004	MW-4	Water	3/9/06 3:35:00 PM	☐	A											
0603177-005	MW-5	Water	3/9/06 3:45:00 PM	☐	A											
0603177-006	EW-1	Water	3/9/06 4:00:00 PM	☐	A		B									
0603177-007	EW-2	Water	3/9/06 3:15:00 PM	☐	A		B									

Test Legend:

1	G-MBTEX_W	2	PREDF REPORT	3	TPH(D)_W	4		5	
6		7		8		9		10	
11		12							

Prepared by: Kathleen Owen

Comments: GI# T0609700517

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.